Philips
LCD widescreen monitor

22" wide
WSXGA+

220CW9FW

# Big stylish wide display for home computainment

Eye-pleasing big, wide display: Stylish design and a host of smart features that elevate LCD viewing to new heights of picture perfect performance for every kind of content make 220CW9 your best computainment choice.

### Outstanding front of screen performance
- SmartImage: Optimized user friendly display experience
- Fast response time up to 2ms
- SmartContrast12000:1 for incredible rich black details
- TrueVision: Laboratory quality display performance
- DVI-D input and HDCP support

### Designed for elegance
- Glossy finish to enhance your decor

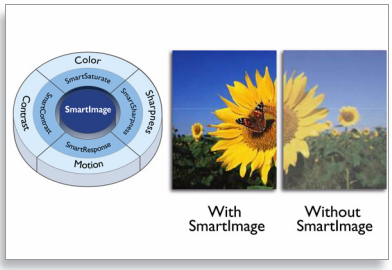
### Green design
- Complies with TCO'06 safety and visual ergonomics standard

### Great convenience
- Dual input accepts both analog VGA and digital DVI signals
- Hassle-free display performance tuning with SmartControl II
- One-touch format switching between wide and 4:3 ratios
- USB port for convenient peripheral connections

PHILIPS
sense and simplicity

# Highlights

## SmartImage

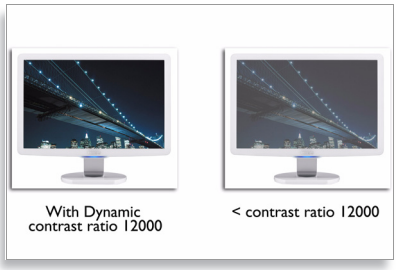



SmartImage is an exclusive, leading edge Philips technology that analyzes the content displayed on your screen. Based on a scenario you select, SmartImage dynamically enhances the contrast, color saturation and sharpness of images and videos for ultimate display performance - all in real time with the press on a single button.

## 2ms GtG response time

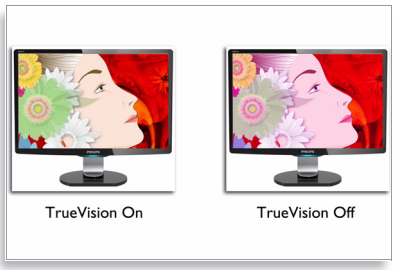
GtG response time is the average time that it takes for a pixel to go from one arbitrary position to another, which is the average time of transition between several sets of random color levels. Faster is better: Lower response time means faster transitions and, therefore, results in fewer visible image artifacts in the display of fast moving images. GtG response time is an important way to measure display quality of multimedia content like movies, videos and games.

## SmartContrast ratio 12000:1




You want the LCD flat display with the highest contrast and most vibrant images. Philips advanced video processing combined with unique extreme dimming and backlight boosting technology results in vibrant images. SmartContrast will increase the contrast with excellent blacklevel and accurate rendition of dark shades and colors. It gives a bright, lifelike picture with high contrast and vibrant colors.

## TrueVision




TrueVision is industry-leading, proprietary Philips testing and algorithm technology for monitor adjustment and fine tuning, an extensive process that ensures ultimate display performance in compliance with a standard four-times more stringent than Microsoft's Vista requirements from each and every monitor that leaves the factory - not just a few review samples. Only Philips goes to these lengths to deliver this exacting level of color accuracy and display quality in every new monitor.

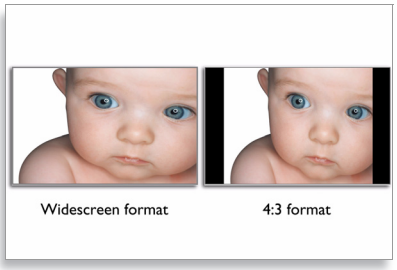
## HDCP ready

High-Bandwidth Digital Content Protection (HDCP) is a copyright protection system that is incorporated into the DVI connector. It helps stop unauthorized duplication of copyrighted content. HDCP allows you to play protected content media such as movies and concerts. It checks the signal to prevent piracy, allowing only legal copies of content to display.

## SmartControl II

SmartControl II is monitor-based software with an easy-to-use on-screen graphic interface that guides you through fine-tuning resolution, color calibration and other display settings including brightness, contrast, clock & phase, position, RGB, white point and - on models with onboard speakers - volume adjustments.

## Auto picture format button




Philips auto picture format is a button that switches from the 4:3 aspect ratio to the widescreen mode and back again to match the display's aspect ratio with your content for working with wide documents without scrolling or viewing widescreen media in the widescreen mode and distortion-free, native mode display of 4:3 ratio content.

## TCO'06 compliance

TCO'06 - compliant monitors meet ergonomic, environmental and health standards for multimedia displays created by TCO - the Swedish Confederation of Professional Employees; TCO'06, the most stringent-ever, covers requirements for visual ergonomics in multimedia display, including health considerations as well as other features that characterize good quality displays. A TCO'06-compliant display's specifications must meet or exceed TCO'06 standards for visual ergonomics, emissions and energy conservation.

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# Specifications

## Picture/Display
- Panel Size: 22" / 55.9 cm
- LCD panel type: 1680 x 1050 pixels, Anti-glare polarizer, RGB vertical stripe
- Optimum Resolution: 1680 x 1050 @ 60Hz
- Maximum Resolution: 1680 x 1050 @ 75Hz
- Display colors: 16.7 M
- Aspect ratio: 16:10
- Brightness: 300 cd/m²
- Contrast ratio (typical): 1000:1
- SmartContrast ratio (dynamic): 12000:1
- SmartResponse: 2 ms (Gray to Gray)
- Picture enhancement: SmartImage
- Response time (typical): 5 ms
- Effective viewing area: 474 x 296 mm
- Viewing angle: 160° (H) / 160° (V), @ C/R > 10
- Horizontal Scanning Frequency: 30 - 83 kHz
- Vertical Scanning Frequency: 56 - 75 Hz
- Pixel pitch: 0.282 x 0.282 mm
- Video Dot Rate: 165 MHz
- sRGB

## Connectivity
- Signal Input: VGA (Analog ), DVI-D
- USB: USB 2.0 x 1
- Sync Input: Composite Sync, Separate Sync, Sync on Green
- Sync input impedance: 2.2k ohm
- Video input impedance: 75 ohm
- Video input signal levels: 0.7 Vpp

## Convenience
- User convenience: SmartControl II, Picture format selection, On-screen Display
- Monitor Controls: Auto (Back), Auto picture, Brightness Control, Input (Down), Menu (OK), Power On/Off, SmartImage
- OSD Languages: English, French, German, Italian, Russian, Simplified Chinese, Spanish, Portuguese
- Plug & Play Compatibility: DDC/CI, Mac OS X, sRGB, Windows 98, Windows 2000, Windows XP, Windows Vista
- Regulatory Approvals: CE Mark, Energy Star, FCC Class B, SEMKO, UL/cUL, TCO '06
- Tilt: -5° to 20°
- Other convenience: Kensington lock compatible

## Dimensions
- Set dimensions with stand (W x H x D): 508 x 425 x 201 mm
- Set dimensions with stand in inch (W x H x D): 20.0 x 16.7 x 7.91 inch
- Relative humidity: 20% - 80%
- Set dimensions (W x H x D): 508 x 344 x 69 mm
- Set dimensions in inch (W x H x D): 20.0 x 13.5 x 2.72 inch
- MTBF: 50,000 hrs
- Temperature range (operation): 0°C to 40°C
- Temperature range (storage): -20°C to 60°C
- Box dimensions (W x H x D): 562 x 482 x 130 mm
- Box dimensions in inch (W x H x D): 22.1 x 18.98 x 5.1 inch
- Product weight (+stand): 4.4 kg
- Product weight (+stand) (lb): 9.7 lb
- Weight incl. Packaging: 6.24 kg
- Weight incl. Packaging (lb): 13.76

## Power
- Consumption (On mode): < 45 W (Typical)
- Consumption (economy mode): 34 W
- Consumption (Off Mode): < 0.8 W
- Complies with: Energy Star
- Power LED indicator: Operation - Blue, Stand by/ sleep -blue(blinking)
- Power supply: Built-in, 100-240VAC, 50/60Hz

Issue date 2009-04-22

Version: 3.1.6

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